IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A method for determining a substrate type comprising:

disposing said substrate in a plasma processing system;

exposing said substrate to a plasma process in said plasma processing system;

detecting an optical signal resulting from an optical emission spectrum of said plasma process performed on said substrate, said optical signal including an intensity ratio of a first intensity corresponding to a first wavelength band to a second intensity corresponding to a second wavelength band; and

determining whether said substrate type is a correct substrate type or an incorrect substrate type by comparing said optical signal with a threshold value,

said threshold value comprises setting said threshold value to an average of an intensity ratio corresponding to the incorrect substrate type and an intensity ratio corresponding to the correct substrate type.

Claim 2 (Original): The method of claim 1, wherein said exposing said substrate to said process comprises exposing said substrate to a seasoning process.

Claim 3 (Original): The method of claim 1, wherein said detecting said optical signal comprises using optical emission spectroscopy (OES).

Claim 4 (Canceled).

Claim 5 (Canceled)

Claim 6 (Canceled).

Claim 7 (Currently Amended): The method of claim [[6]] 1, wherein said determining said substrate type comprises determining ~~a~~ the correct substrate type when said intensity ratio has a value less than said threshold value, and determining ~~an~~ the incorrect substrate type when said intensity ratio has a value greater than said threshold value.

Claim 8 (Currently Amended): The method of claim [[6]] 1, wherein said determining said substrate type comprises identifying a seasoning substrate when said intensity ratio has a value less than said threshold value, and identifying a bare silicon substrate when said intensity ratio has a value greater than said threshold value.

Claim 9 (Canceled).

Claim 10 (Currently Amended): The method of claim 1, wherein said comparing said optical signal with said threshold value comprises comparing said optical signal with at least one of a static threshold value, [[and]] or a dynamic threshold value.

Claim 11 (Withdrawn): A system for determining a substrate type comprising:

a diagnostic system configured to be coupled with a plasma processing system, and configured to provide an optical signal from a process performed on a substrate in said plasma processing system; and

a controller coupled to said diagnostic system and configured to determine a type of said substrate by comparing said optical signal to a threshold value.

Claim 12 (Withdrawn): The system of claim 11, wherein said diagnostic system is configured to provide an optical signal from a seasoning process.

Claim 13 (Withdrawn): The system of claim 11, wherein said diagnostic system comprises an optical emission spectroscopy (OES) system.

Claim 14 (Withdrawn): The system of claim 13, wherein said optical emission spectroscopy system is configured to provide an optical emission spectrum from said process.

Claim 15 (Withdrawn): The system of claim 14, wherein said controller is configured to determine an intensity ratio from said optical emission spectrum.

Claim 16 (Withdrawn): The system of claim 15, wherein said controller compares said optical signal with said threshold value by comparing said intensity ratio with said threshold value.

Claim 17 (Withdrawn): The system of claim 16, wherein said controller determines said substrate type by determining a correct substrate type when said intensity ratio has a value less than said threshold value, and determining an incorrect substrate type when said intensity ratio has a value greater than said threshold value.

Claim 18 (Withdrawn): The system of claim 16, wherein said controller determines said substrate type by determining a seasoning substrate when said intensity ratio has a value

less than said threshold value, and determining a bare silicon substrate when said intensity ratio has a value greater than said threshold value.

Claim 19 (Withdrawn): The system of claim 17, wherein said controller determines said substrate type by comparing to a threshold value comprising a value equal to an average of an intensity ratio corresponding to said incorrect substrate type and an intensity ratio corresponding to said correct substrate type.

Claim 20 (Withdrawn): The system of claim 11, wherein said controller determines said substrate type by comparing to a threshold value comprising at least one of a static threshold value, and a dynamic threshold value.

Claim 21 (Currently Amended): A method for determining a substrate type comprising:

disposing said substrate in a plasma processing system;

exposing said substrate to a seasoning process in said plasma processing system;

detecting an optical signal resulting from an optical emission spectrum of said process using optical emission spectroscopy, wherein said optical signal comprises an intensity ratio of a first intensity corresponding to a first wavelength band to a second intensity corresponding to a second wavelength band; and

determining whether said substrate is a correct substrate type or an incorrect substrate type by comparing said optical signal with a threshold value, wherein said threshold value is set to an average value between an intensity ratio for [[a]] the correct substrate type and an intensity ratio for ~~an~~ the incorrect substrate type.

Claim 22 (Original): The method of claim 1, wherein said exposing said substrate to said process comprises exposing said substrate to a production process.